

STATE OF COLORADO

GOVERNOR'S ENERGY OFFICE

225 E. 16th Ave., Suite 650

Denver, CO 80203-1625

Phone: (303) 866-2100

Fax: (303) 866-2930

geo@state.co.us

www.state.co.us



Bill Ritter, Jr.
Governor

Tom Plant
Director

To: Geothermal Working Group
From: Joani Matranga – Western Slope Regional Representative
Date: February 1, 2008

Subject: 2008 Geothermal Action Plan

This 2008 plan is accompanied by the Colorado Geothermal Development Strategic Plan available on GEO's website at www.colorado.org/energy with input from the Geothermal Working Group on Dec. 20, 2007.

Objective/Actions:

- A. Identify geothermal resources for economic development with direct use of heat energy and/or for electricity production.
 1. Issue an RFI in early February to create a list of potential projects and resources available to assist in development of geothermal in Colorado.
 2. Assemble the Geothermal Working Group 2 times in 2008 to advise on recommendations in the Strategic Plan and activities in this action plan. Proposed meeting dates March '08 and August '08. At least 2 teleconference meetings will be held; the first is February 5, 2008.
 3. Conduct a DOE Trade Mission to Reno, Nevada in June 2008 to explore technology options and resources for interested partners for electricity production.
 4. Investigate frameworks for reducing barriers to geothermal development with community leaders, geothermal development experts and owners of geothermal properties. A representative committee will be formed and facilitated to identify possible solutions to reduce uncertainties.
 5. Support the hiring of a full-time geologist with the Colorado Geological Survey (CGS). This geologist will continue the assessment of the geothermal resource; the work plan to include activities included on pages 11 and 12 from the Strategic Plan.

6. Geologists from CGS and GEO Western Slope Regional Representative will create a matrix of target geothermal resource areas. The matrix shall rate potential development for various parameters: i.e. knowledge of resource, type of resource, environmental concerns, previous drilling, community support, transmission availability, utility support, potential uses.
 7. Develop strategic work plan with CGS input to prepare for potential DOE funding solicitations in 2008-2009 DOE funding cycle including exploration support and other opportunities for developing Colorado's resource..
 8. Explore options including possible public/private partnerships with DOE for EGS, Enhanced Geothermal System, pilot project in Colorado with assistance of Colorado School of Mines.
 9. CSM to review existing geological services in the state universities for possible collaboration under the Collaboratory.
- B. Evaluate the application of ground source heat pumps as a potential clean resource.
1. Undertake a study to consider the Carbon Dioxide Emissions for Ground Source Heat Pump applications versus various fossil fuels including heating with natural gas and cooling with conventional air conditioning in Colorado Climate Zones.
 2. Determine if a program, policy or incentive is appropriate for GSHP as a Demand Side Management option for natural gas/electric applications. Brief white paper on benefits/issues from PUC staff will be used to initiate the discussion with the Working Group.
 3. Conduct a workshop for utilities on GSHP applications.
 4. Determine criteria (i.e. life cycle analysis, best practices) for evaluation and design of GSHP applications for new construction in public buildings and schools.